

Working Document

APR 16 1982

ROUTING AND TRANSMITTAL SLIP

Date

9/13/82

TO: (Name, office symbol, room number,
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Initials

Date

1. Kurent
2. Olson
3. Cherney Speicher
4. Nace Anzzolin
5. Belk Batty

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Attached: Final California
Class II UIC application.
Cover letter explains.

Review: 28 April 1982

10:00 a.m. 55 ET

DO NOT use this form as a RECORD of approvals, concurrences, disposals,
clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

Room No.—Bldg.

P. Tate

Phone No.

4268290

5041-102

☆ U.S. G.P.O. 1980-311-156/4

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

Nate Lau
FTS 454-8274
Speedy phone - 454-8089

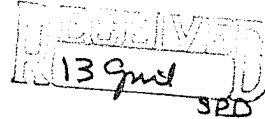
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: April 9, 1982

SUBJECT: California's Application for Primacy Over Class II
Wells in the Underground Injection Control (UIC) Program

FROM: William M. Thurston *William M. Thurston*
Chief, Water Supply Section, Region IX

TO: Phil Tate
UIC Review Coordinator
State Program Division (WH-550)



The application submitted by California's Division of Oil and Gas (CDOG) for primary enforcement authority over Class II wells of the UIC program was transmitted to you by a memo dated May 7, 1981. Attached for your final review are ten (10) copies of CDOG's response to EPA's comments.

The attachments include:

1. a copy of EPA - Headquarters' comments;
2. an index linking EPA's comments to CDOG's responses; *follows*
3. CDOG's response; *ATT: 1*
4. copies of working relationships between CDOG and other agencies, and
5. the re-negotiated MOA between CDOG and EPA, Region 9.

The response to the comments was provided by section. If the response and the original application together proves to be a successful demonstration of the State program under Section 1425 of SDWA, the response will be made an appendix to the original application. This will avoid a wholesale revision of the application.

By a separate memo, we will be transmittting a draft public hearing notice for your review. The target hearing dates are June 1, 1982 in Bakersfield, CA and June 3, 1982 in San Francisco, CA.

If you have any questions, please do not hesitate to call Nathan Lau at 454-8274 or me at 454-8221.

Attachments

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EPA's Comments

CDOG's response

Major Issues

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: JUL 16 1981

SUBJECT: Headquarter Comments on California
1425 Primacy Draft Proposal

FROM: Phillip Tate, Special Assistant
Office of Drinking Water, WH-500

TO: Bill Thurston, Inspection
Water Supply Coordinator, R-IX

The Environmental Protection Agency (EPA) Headquarters Underground Injection Control Primacy Review Group completed its work on the California 1425 draft on June 26, 1981. These comments which were given to the Region by telephone on June 27, 1981, are included for the record.

As with proposals from other States, there are some areas in the California application that without clarification, amplification, or change would make it difficult for one or more of the reviewing offices to concur in the approval. We present the following major issues each of which in itself we consider to be potentially prejudicial to approval.

MAJOR ISSUES

1. Section 3224 of the California Public Resource Code speaks of ordering necessary tests and remedial work to "...prevent the infiltration of detrimental substances into underground or surface water suitable for irrigation or domestic purposes...." Section 3106 states that the supervisor must prevent damage to "natural resources" (includes water)..." and damage to underground and surface water suitable for irrigation or domestic purposes...." Are these two assertions the legal equivalent of endangering underground drinking water sources as used in Section 1421 (b)(1)(B) of the SDWA and the definition of an effective program in Section 1425.
2. It is not clear as to what enforcement mechanisms the State has available for action against either repeat or very serious violators. Can actions be taken in situations where a willful violator waits until a State compliance order is issued before correcting a serious violation? Does the State Director have discretion to seek penalties for the past violation even if the operator complies with the subsequent State order?

3. Under §3106, the supervisor must prevent, as far as possible, damage to natural resources, etc. Does the policy and operational history indicate a broad or narrow interpretation of "as far as possible"?

4. Section 1723.2 uses the term "fresh water" which is not defined. This term must be clarified by either the Attorney General or the Division.

General Comments

The general comments though singularly significant assume critical importance when considered in the aggregate.

I. Program Description

1. The Program Description does not discuss implementation of primacy to extend to protecting offshore aquifers. Refer to F.R. 122.31. This should be clarified.
2. If the State has or claims authority over Indian lands, citation or explanation of such authority should be evidenced.
3. Are aquifer exemptions granted for mineral bearing or mineral producing aquifers?
4. Does the "agreement" between the applicant and the State Water Resources Control Board contain information not apparent in the existing application? Please provide a copy of the agreement.
5. The Program Description does not spell out specific procedures for public participation. Such policies and, as necessary, procedures as well as provision for oversight should be included in the MOA. What is the operational history of the public participation effort?
6. Is a permit the same as an order?
7. Only written complaints by adjacent landowners or operators within one mile are required to be investigated. What is the policy for treating informal complaints? What is the operational history? A statement in the MOA may be sufficient.
8. There is no indication of how the division keep records or how often inspections are actually made or by whom.

3
ANSWERED

2014

This should be clarified.

II. Rules, Regulations, Statutes

- * 1. §3203 states that applications not responded to within 10 days are deemed approved. What is the practical effect of this rule based on operational history? (Excessive use of the non-response practice for approvals could be potentially prejudicial to program approval).
2. §3229 states that a "notice of intent to abandon" not responded to in writing within 10 days shall be deemed to be approved. What is the practical effect of this rule based on operational history?
3. Under §3013, 3106, and 3255, the supervisor is given broad authorities, including that over the aquifer exemption process. The Program Description does not spell out specific requirements and procedures, such as public notice, public participation, criteria. These specifics, as appropriate, should be addressed in the MOA if the Program Description cannot be changed.
4. Section 1724.6 of the regulation requires division approval prior to subsurface injection or disposal and requires the operator to provide such data as the supervisor deems pertinent and necessary for proper evaluation. This places the burden on the applicant, assuming that "damage" to water "suitable for irrigation or domestic purposes" is analogous to endangering drinking water sources. This should be clarified.
5. Is the data required under Section 1724.7 sufficient to make a judgment on endangerment as prescribed in Section 1421 of the SDWA? (A negative assessment of this requirement could be potentially prejudicial to program approval).
- * 6. Section 1722 permits the establishment of field rules and permits exceptions to be made for casing and cementing requirements. Are those consistent with the overall requirements to protect water suitable for irrigation or domestic purposes? Reference 1421(b)(1)(B).
7. Various sections of the Code and regulations require reports and data to be submitted to the supervisor.

30/4

Does the supervisor ever verify the accuracy of these reports, etc., independently?

8. Sections 1724.7(c)(3), and 1724.10(c)(j) address monitoring. These requirements may be modified for good cause. What have been and are the effects and conditions of modification?
9. Various sections of the regulations provide that tests, etc., be witnessed by division personnel. How often does the supervisor witness these tests?
10. Though necessary authorities exist for inspection, monitoring, record keeping and reporting, is there any independent verification of actions and data?
11. The term "person" as defined in 3010 and 3011 must include Federal agencies as required by 1421(b)(1)(D)(i). This should be verified by demonstration of statutory or case law from the Attorney General.
12. The States authority over activities on property owned or leased by the Federal Government should be verified by demonstration of statutory or case law. (The lack of such authority could be potentially prejudicial to program approval).
13. Do the confidentiality provisions in §3234 and 1996.2 limit EPA oversight activities? This should be addressed in the MOA. (How was the similar situation handled in the NPDES program?)

3/6/41

DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

1416 - 9th STREET, ROOM 1310
SACRAMENTO, CALIFORNIA 95814
(916) 445-9686

U.S.E.P.A.
REGION 9
COMM CNTR



MAR 31 10 28 AM '82

March 29, 1982

Mr. Nathan Lau
U. S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, California 94105

Dear Mr. Lau:

In response to your request of March 10, 1982 for additional information and clarification of Division of Oil and Gas authority, practices, and aquifer exemptions for underground injection projects, the attached data is submitted for your review.

Attachment 1 is a response to the questions on authority and practice that were submitted to the CDOG by the EPA.

Attachment 2 is a table of the proposed nonhydrocarbon-producing aquifers that are proposed to be exempted per the Division's application for primacy. The table shows, in part, the amount of total dissolved solids (TDS) of the water in the aquifers prior to injection and of the water injected.

If you have further questions, please let me know.

Sincerely,

A handwritten signature in cursive script, appearing to read "M. G. Mefferd".

M. G. Mefferd
State Oil and Gas Supervisor

Attachments(2)

cc: Greg Williams, SWRCB

Section

A. Structure, Coverage, and Scope of the State Program

- TATE'S
Question
No.
1. major
con
1. Section 3224 of the California Public Resources Code (CPRC) speaks of ordering necessary tests and remedial work to "...prevent the infiltration of detrimental substances into underground or surface water suitable for irrigation or domestic purposes...". Section 3106 states that the Supervisor must prevent damage to "natural resources...and damage to underground and surface water suitable for irrigation or domestic purposes...". Are these two assertions the legal equivalent of endangering drinking water sources as used in Section 1421(b)(1)(B) of the SDWA?

Yes. The California Public Resources Code (PRC) states that any water that is considered to be usable for domestic purposes, which certainly includes sources of drinking water, must be protected.

In addition, the policy statement contained in the Memorandum of Agreement between the EPA and the CDOG states that the purpose of the program is to prevent any underground injection that endangers underground sources of drinking water (USDW). By signing the MOA and applying for primacy for Class II wells, the CDOG and the State has demonstrated their intention to protect USDW's as defined in the SDWA.

4. major
con
2. Section 1723.2 of Title 17, California Administrative Code (CAC) uses the term "fresh water" which is not defined. This term must be clarified by either the Attorney General or the Division of Oil and Gas.

2. —

As indicated in our response to Question 1, water used for domestic purposes includes sources of drinking water. Therefore, water used for domestic purposes would include "fresh water". The specific TDS is not assigned to the terms "domestic" or "fresh"; however, the CDOG is mandated by these terms to protect any waters that a water quality control agency determines to be usable. For this specific case, the SDWA states that waters of 10,000 TDS or less must be protected. As stated in the MOA, the CDOG will protect USDW's.

3. major
con

ok Under Section 3106 of the CPRC, the Supervisor must prevent, as far as possible, damage to natural resources, etc. Does the policy and operational history indicate a broad or narrow interpretation of "as far as possible"?

"As far as possible" is interpreted broadly. For example, Section 3013 of the PRC, which is used as a primary authority

for promulgation of regulations, states that "This division shall be liberally construed to meet its purposes, and the director and the supervisor shall have all the powers which may be necessary to carry out the purposes of this division." (Emphasis added) (See page D-1 of the Application for this statute.)

In addition, Section 3224 states that the Supervisor can order tests or remedial work that in his judgment are necessary to prevent damage to life, health, property, and natural resources. (See pages 20 and D-5 of the Application.)

PD 1

4. The Program Description does not discuss implementation of primacy to extend to protecting offshore aquifers. This should be clarified.

Division of Oil and Gas mandates to protect life, health, property, and natural resources (Sec. 3106) apply to offshore resources as well as onshore. The CDOG has jurisdiction throughout the State of California, which extends offshore to the three-mile limit. Therefore, the Application is considered to apply to the protection of offshore aquifers that are USDW's.

PD 2

5. If the state has or claims authority over Indian lands, citation or explanation of such activity should be evidenced.

The State does not claim authority over Indian lands, and this fact is stated also in the MOA (IIA).

Rule 4

6. Section 1724.6 of the CAC requires the Division's approval prior to subsurface injection or disposal and requires the operator to provide such data as the Supervisor deems pertinent and necessary for proper evaluation. Assuming that "damage to water suitable for irrigation or domestic purposes" is analagous to endangering drinking water sources, this places the burden on the applicant. This should be clarified.

The burden is placed upon the applicant to provide data that will be used as an aid to evaluate proposed injection projects. Section 1724.7 details the data that are required to be submitted to the Division before approval can be given to inject fluids. Additional data may also be requested of the operator for projects that are large, unusual, or hazardous; for projects that are on unusual or complex structures; and for projects that contain critical wells. (See page D-17 of the Application for a listing of the data to be submitted.)

Rule 5

7. Is the data required under Section 1724.7 sufficient to make a judgment on endangerment as prescribed in Section 1421 of the SDWA?

Yes. Using the engineering and geologic data in conjunction with information contained in the files of the CDOG to

evaluate a project is sufficient to ensure that underground sources of drinking water are protected. Additional data are requested of the operator when necessary to ensure protection of USDW.

Rule 11

8. The term "person" as defined in Sections 3010 and 3011 of the Public Resources Code must include Federal Agencies as required by 1421 (b)(1)(D)(i). This should be verified by demonstrations of statutory or case law by the Attorney General.

See attached letter dated 8-24-81 from the Attorney General. The letter verifies that "Federal Agencies" are included in the definition of "person".

Rule 12

9. The State's authority over activities on property owned or leased by the Federal Government should be verified by demonstration of statutory or case law.

See attached letter dated 8-24-81 from the Attorney General. The letter verifies such authority.

B. Description of the State Permitting Process

PD 6

1. Any differences between a permit and an order should be clarified.

Upon receipt and review by the Division of an application or notice of intent to drill, rework, inject, etc., the Division will generally issue a permit that will allow an operator to perform the work. The permit contains conditions that the operator must adhere to.

If an operator fails to adhere to the conditions of the permit, the Division may order the operator to perform the work, and if the work is not done, the Division will cause the work to be performed by third parties. The operator would then be subject to a lien to pay for the work.

The Division may also order tests or remedial work to be performed that in its judgment are necessary to prevent damage to life, health, property, and natural resources.

Rule 1

2. Section 3203 of the CPRC states that applications not responded to within 10 days are deemed approved. What is the practical effect of this rule based on operational history?

As a matter of practice, the CDOG responds to all notices within the 10 days; however, Section 3203 does not say that a notice must be approved within the 10 days -- only a response must be made. The response may only specify a reason the approval cannot be made within 10 days. For

instance, additional information may be necessary or an environmental review may be required by a local agency prior to the Division approval.

- Rule 2
3. Section 3229 CPRC states that a "notice of intent to abandon" not responded to in writing within 10 days shall be deemed to be approved. What is the practical effect of this rule on the operational history?

As a matter of practice, all notices to abandon are responded to within 10 days. If there ever is a reason that a notice cannot be approved within 10 days, the Division will respond to the applicant and state the reason for the delay. This type of response will prevent the "notice of intent to abandon" from becoming a written report of the Supervisor.

H. Description of Rules Used by the State to Regulate Class II Wells

- Rule 1
1. Section 177² of the CAC permits the establishment of field rules and permit exceptions to be made for casing and cementing requirements. Are these consistent with the overall requirements to protect water suitable for irrigation or domestic purposes?

Emergency

Yes. The establishment of field rules does not have a negative impact on the Division's mandate to protect life, health, property, and natural resources. In fact, the establishment of field rules could even enhance the protection of USDW's if such rules were made to provide a higher level of protection. Field rules never provide a lower level of protection of USDW's; they merely adjust existing requirements to site-specific needs.

K. Monitoring, Inspection, and Reporting

- Rule 9
1. There is no indication of how the Division keeps records or how often inspections are actually made or by whom.

The CDOG keeps a complete record of the history of every well drilled in California. This record contains all notices to perform work; responses to such notices; inspection reports; the mechanical condition of the well -- cementing, plugging, casing, and perforating; and production and/or injection volumes. These records are kept permanently (see page 17 of the Application).

As indicated on pages 17-19 of the Application and in Sections 1723.7 and 1724.10(j) of the CAC (pages D-15 and D-18 of the Application), a listing is presented of the tests and plugging operations that require witnessing and approval by a Division employee.

On pages 24 and 25 of the Application, it is stated that Energy and Mineral Resources Engineers, Petroleum Technical Assistants, or Junior Engineering Technicians conduct the required tests and inspections on a 24-hour basis, seven days a week. The minimum qualifications for these positions are also presented on pages 24 and 25.

2. Though the necessary authorities exist for inspection, monitoring, record keeping, and reporting, is there any independent verification of the accuracy of the reports, actions, and data?

Yes. Division inspectors collect all pertinent data during well inspections and the witnessing of tests. These data are compared with the records filed by the operator. Spot audits of production and project reviews are also conducted by Division engineers to verify data.

3. Sections 1724.7(c)(3) and 1724.10(c)-(j) address monitoring. These requirements may be modified for good cause. What have been and are the effects and conditions of modification?

As mentioned in previous answers and in the Application, the CDOG has a mandate to protect waters suitable for irrigation and domestic use. Any modification that may be made by the CDOG regarding the monitoring of injection projects will not have a negative impact on the CDOG or the operator to effectively monitor injection projects. Modifications are merely adjustments to site-specific conditions.

L. Enforcement Program

1. It is not clear as to what enforcement mechanisms the State has available for action against either repeat or very serious violators. Can actions be taken in situations where a willful violator waits until a State compliance order is issued before correcting a serious violation? Does the State have discretion to seek penalties for the past violations even if the operator complies with the subsequent State order?

Section L of the Division's Application explains the actions that the CDOG can take to enforce the laws and regulations relating to the production of oil and gas or to the injection of fluids.

As stated in section L, the CDOG can order the immediate shutdown of any operation that contributes to the degradation of fresh waters (USDW's). A formal order does not have to be issued before the shutdown occurs, only written notification from the CDOG is necessary. In fact, this provision is listed as one of the conditions of the permit that is issued to an operator to inject fluids. (See condition 2 of the example on page C-7, and Section E, Termination of Permits, page 10 of the Application).

If an operator repeatedly or willfully violates injection requirements, the CDOG can order the operator to cease injection operations. Again, this is a condition of the permit. If the operator refuses to cease operations, legal action can be taken.

Section 3236 (page D-6) states that any person who violates,

fails, neglects, or refuses to comply with any provisions of this chapter, ...is guilty of a misdemeanor. This provides the Division with the authority to seek penalties for past violations, even if the operator complies with the subsequent State order. (pos)

M. Aquifer Exemption Process

- PD 3
1. Are aquifer exemptions granted for mineral-bearing or mineral-producing aquifers?

Aquifer exemptions will be granted for hydrocarbon-producing aquifers and aquifers that are currently being used for injection purposes. Both of these types of aquifers are subject to EPA approval, as specified in the MOA.

- Rules 3
2. Under Sections 3013, 3106, and 3255 of the CPRC, the Supervisor is given broad authorities, including that over the aquifer exemption process. The Program Description or Memorandum of Agreement should spell out specific policies, requirements, and procedures (e.g., public notice, public participation, criteria) for aquifer exemptions.

See § 1425
guidance
5.6(e)(1)(C)(iv)

Public participation for the aquifer exemption process will be conducted in the same manner as public participation for injection project approvals. Public notices will be published in appropriate newspapers. The notices will indicate that interested parties will have 15 days to provide comments on any proposed aquifer exemptions. The content of the responses to the published notices will be used to determine if a public hearing is necessary to receive additional comment and information. Any public hearings will be conducted in the district in which the aquifer proposed to be exempted is located.

R. Public Participation

- PD 5
1. The policies for public notification should be more clearly stated as it relates to new projects and substantial modifications of existing permits.
 2. The specific procedures for public participation should be provided.

See the response to question M. 2 and Section R (page 26) of the Application.

3. A brief operational history of the public participation effort should be provided.

There is no prior history for public participation in project approvals. Public notice for these projects were not required; however, by means of the CDOG Application for Primacy for Class II Wells, the CDOG has agreed to give notice and opportunity for public hearings, as described in Sections M (page 22) and R (page 26), for all project applications and aquifer exemptions.

S. Complaint Response Procedures

- PD 7
1. Only written complaints by adjacent landowners or operators within one mile are required to be investigated. What is the policy for treating informal complaints? What is the operational history?

As described in Section S (page 26), all informal complaints are investigated by the District Deputy and his staff. In summary, if the complaint is found to be justified, then corrective and enforcement measures will be handled in the same manner as formal complaints.

NONHYDROCARBON-PRODUCING ZONE INJECTION DATA

DIST.	FIELD	FORMATION & ZONE	TDS OF ZONE WATER PRIOR TO INJECTION	TDS OF INJECTED WATER	VOLUME INJECTED (Barrels)	INJECTION STARTED	REMARKS
1	Belmont Offshore	Repetto	30,800				
1	Huntington Beach	Lakewood					
		Alpha 1	37,200				
		Alpha 2	12,500				
1	Sawtelle	Puente	25,500				
1	Seal Beach	Repetto	29,700				
		Recent Sands	30,200				
1	Wilmington	Gaspur	28,200				
1	"	River Gravels	30,800				
2	Ramona	Pico	5,000	15,300 ppm NaCl	1,793,000	6/51	
2	South Tapo Canyon	Pico	1,900 ppm NaCl	600 ppm NaCl	1,903,000	1/48	
2	Oat Mountain	Undiff.	4,800	23,800 ppm NaCl	91,000	4/56	
2	Simi	Sespe	4,300	25,500 ppm NaCl	695,000	6/48	
3	Guadalupe	Knoxville	30,500				
3	Lompoc	Lospe	119,000				
3	Lompoc	Knoxville	30,500				
3	Russell Ranch	Branch Canyon	13,000				
3	San Ardo	Santa Margarita	3,700	5,600	81,800,000	11/66	
3	"	Monterey "D" Sand	4,600	5,600	13,795,000	7/59	
3	"	Monterey "E" Sand	6,400	5,600	6,057,000	3/68	
3	Santa Maria Valley	Lospe-Franciscan	119,000				
3	Monroe Swell	Santa Margarita	3,700 ppm NaCl	9,600	?	1981	
3	Point Conception	Camino Cielo	26,200				
3	Guadalupe	Franciscan	30,500				
4	Bellevue	Etchegoin	26,500 (Analysis from adjacent field)				
4	Bellevue, West	Tulare	12,000*				
4	"	Etchegoin	26,500 (Analysis from adjacent field)				
4	Blackwell's Corner	Tumey	2,100 -2,600*	29,000 ppm NaCl	400,000	5/75	Idle since 1975
4	Buena Vista	Tulare	9,200	5,300-36,500	50,798,000	11/72	11 ppm boron
4	Cal Canal	Tulare-San Joaquin	Excess of 10,000*	22,000	537,000	5/79	
4	Canfield Ranch	Etchegoin	≈12,800-26,500 (Analysis from adjacent fields)				

*"E" log calculation

DIST.	FIELD	FORMATION & ZONE	TDS OF ZONE WATER PRIOR TO INJECTION	TDS OF INJECTED WATER	VOLUME INJECTED (Barrels)	INJECTION STARTED	REMARKS
4	North Coles Levee	Tulare	12,900				
4	"	San Joaquin	40,000-45,600				
4	"	Etchegoin	30,100				
4	South Coles Levee	Tulare	12,000-13,300				
4	"	San Joaquin	12,000-16,900				
4	Greeley	Etchegoin	26,500				
4	Kern Bluff	Kern River	400- 900	(From Kern River Field) 600	551,500	7/80	
4	"	Vedder	7,800-16,100	" 11,700-213,000	4,099,000	3/80	
4	Kern Front	Santa Margarita	2,300	1,100		9/75	
4	Kern River	Chanac	238- 925	374- 865	1,071,000	6/77	Reclamation plant water injected
4	"	Santa Margarita	600- 2,600	475- 16,200	154,994,000	9/73	Scrubber and softener effluent injected
4	"	Vedder	7,800-16,200		33,204,000		
4	Lakeside	San Joaquin	21,500				
4	Los Lobos	Tulare	33,300*				
4	Midway-Sunset	Alluvium	No water	3,600- 25,700		7/59	
4	Mount Poso	Walker	2,800*	830- 1,440	22,632,000	9/75	
4	Mountain View	Kern River	4,660*	1,200- 3,800	3,681,000	12/65	
4	Pleito	Chanac & Kern River	7,900-11,800	12,800-30,800	889,000	8/74	
4	Poso Creek	Vedder	12,500				
4	Rio Viejo	San Joaquin	21,000*				Injection not started
4	Rosedale	Etchegoin	26,500	(Analysis from adjacent field)			
4	Round Mountain	Olcese	2,700	1,337- 1,965	29,797,000	7/74	
4	"	Walker	1,930	1,600- 2,100	203,319,000	8/72	
4	Seventh Standard	Etchegoin	17,100-30,000	(NaCl only)			
4	Strand	Etchegoin	8,600	(NaCl only)	1,195,000	7/62	
				16,500-25,600 (NaCl only)			
4	"	San Joaquin	33,400				
4	Ten Section	San Joaquin	12,900				
5	Burrel	Santa Margarita	35,000	(Analysis from Helm field)			
5	"	Tulare-Kern River	20,500	(Analysis from S.E. Burrel field)			
5	Southeast Burrel	Tulare-Kern River	20,500				
5	Coalinga	Santa Margarita	8,244	3,100- 3,500	(145,000,000	2/63	
5	"	Etchegoin-Jacalitos	2,650- 2,900	2,650-2,700	(2/63	
5	Gill Ranch Gas	Zilch	14,500				

"E" log calculation

<u>DIST.</u>	<u>FIELD</u>	<u>FORMATION & ZONE</u>	<u>TDS OF ZONE WATER PRIOR TO INJECTION</u>	<u>TDS OF INJECTED WATER</u>	<u>VOLUME INJECTED (Barrels)</u>	<u>INJECTION STARTED</u>	<u>REMARKS</u>
✓ 5	Guajarral Hills	Etchegoin-Jacalitos	9,400	20,500	931,000	4/67	
5	Helm	Santa Margarita	35,900		(143,000,000		
5	"	Tulare-Kern River	5,100-23,900	11,600-43,400	(12/52	
5	Jacalitos	Etchegoin-Jacalitos	33,749	5,500 (C1 only)	180,000	10/78	
5	Kettleman North Dome	San Joaquin-Etchegoin	10,000	23,800-31,200	48,608,000	8/64	
5	Raisin City	Pliocene	12,800-34,000				
5	"	Santa Margarita	35,000	(Analysis from Helm field)			
5	Riverdale	Pliocene	4,788-16,200		(72,626,000	7/57	
5	"	Santa Margarita	35,900	(Analysis from Helm field)	(
5	San Joaquin	Pliocene	17,100				
5	San Joaquin, Northwest	Basal McClure	90,000	18,500	Test well-no injection		
5	Turk Anticline	San Joaquin	3,700- 4,440	9,500- 9,800	466,000	11/76	
6	Bunker Gas	Undiff.	1,200	11,000	388,000	1/75	
6	Grimes Gas	Kione	16,800				
6	Grimes, West, Gas	Kione	34,000*				
6	La Honda (South Area)	Vaqueros	41,000				
6	Lathrop Gas	Starkey	15,400*				
✓ 6	River Break Gas	Capay	6,900*	7,000	93,000	7/75	
6	Roberts Island Gas	Undiff.	18,000*				
6	Sutter Buttes Gas	Kione	2,500	4,600-23,000	644,000	7/77	
6	Union Island Gas	Mokelumne River	5,000-6,000*	7,800	471,000	7/77	
6	Wild Goose	Undiff.	2,800-5,000*	21,400	823,000	11/69	

* "E" log calculation

Memorandum

To : M. G. Mefferd
State Oil and Gas Supervisor
1416 Ninth Street, Room 1310
Sacramento, CA 95814

Date : August 24, 1981

File No.:

From : Office of the Attorney General - Alan V. Hager

Subject: EPA Comments on UIC Class II
Primacy Application

You have requested that I respond to two questions raised by the Environmental Protection Agency (EPA) in its comments on the Underground Injection Control Class II Primacy Application of the California Division of Oil and Gas (CDOG). The questions are numbers 11 and 12 under the heading of "Rules, Regulations, Statutes."

Question 11 asks whether the term "person" as used in sections 3010 and 3011 of the Public Resources Code includes federal agencies. The EPA apparently wants assurance that the California program meets the requirement of section 42 U.S.C. section 300h(b)(1)(D)(i) (section 1421(b)(1)(D)(i) of the Safe Drinking Water Act) that it apply, as prescribed by section 300j-6(b), to underground injection by federal agencies. The answer is that the term "person" includes federal agencies.

"Person" is defined in section 3005 of the Public Resources Code as including "any individual, firm, association, corporation, or any other group or combination acting as a unit." This term was construed in a 1951 opinion of the Attorney General as including a municipal corporation conducting oil operations. 17 Ops.Cal.Atty.Gen. 125 (1951). The opinion noted that "person" was broadly defined and that the California oil and gas conservation statute contained no exemption for any type of operator. Therefore, there was no basis for excluding a governmental entity which operates an oil well, in that case a city, from the requirements of the statute. This reasoning applies with equal force to federal agencies operating oil and gas wells.

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DIVISION OF OIL & GAS
SACRAMENTO

M. G. Mefferd
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The history of the implementation of the state oil and gas conservation statute by the CDOG reveals a continual application of the law to all governmental entities, including federal agencies, operating oil and gas wells in California. "'Consistent administrative construction of a statute over many years, particularly when it originated with those charged with putting the statutory machinery into effect, is entitled to great weight and will not be overturned unless clearly erroneous. [Citations.]" City of Los Angeles v. Public Utilities Commission (1975) 15 Cal.3d 680, 696.

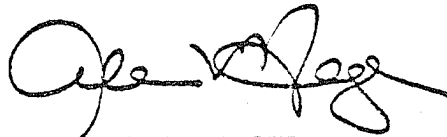
Question 12 asks for statutory or case law verification for the CDOG's authority over Class II injection on property owned or leased by the federal government. The purpose of this question appears to elicit assurance that the CDOG has jurisdiction over all oil and gas operators on federal lands. The CDOG does have that jurisdiction and has continually exercised its authority over all such operators.

The Mineral Lands Leasing Act of 1920, under which the Secretary of the Interior leases federal lands for oil and gas development, provides that it shall not "affect the rights of the States or other local authority to exercise any rights which they may have, including the right to levy and collect taxes upon improvements, output of mines, or other rights, property, or assets of any lessee of the United States." 30 U.S.C. section 189. This provision has been construed to mean that the states may exercise their police power over federal oil and gas leases, which includes requiring all federal lessees to abide by their oil and gas conservation laws. Texas Oil and Gas Corp. v. Phillips Petroleum Co. (W.D. Okla. 1967) 277 F.Supp. 366, 370-71, affirmed 406 F.2d 1303, cert. denied 396 U.S. 829.

The CDOG has continually and consistently applied its oil and gas conservation statute to all operators, governmental and nongovernmental, on all federal lands in California. With respect to federal government operators, 42 U.S.C. section 600j-6(a) requires that they comply with all requirements of a state underground injection program to the same extent any nongovernmental entity would be required to comply. Therefore, whoever the operator on federal lands

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may be, there is ample legal authority for the CDOG's
ability to control its underground injection activities.

A handwritten signature in dark ink, appearing to read "Alan V. Hager", with a stylized, cursive script.

ALAN V. HAGER
Deputy Attorney General

AVH:mjp

DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

6-9th STREET, ROOM 1310
 SACRAMENTO, CALIFORNIA 95814
 (415) 9688



April 27, 1979

Mr. Reid T. Stone
 Area Geothermal Supervisor
 U.S. Geological Survey
 Conservation Division, MS 92
 345 Middlefield Road
 Menlo Park, California 94025

Dear Mr. Stone:

Cooperative procedures practiced during the past several years have reduced paperwork and benefited both the California Division of Oil and Gas (CDOG) and the U.S. Geological Survey (USGS). The resolution of the status of Stockraising Homestead Act geothermal rights now permits those informal procedures, which have worked so well, to be reaffirmed in more precise and formal terms. These procedures should benefit our respective field representatives by allowing them to understand their regulatory jurisdiction and responsibilities more clearly.

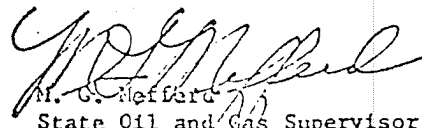
In general, it has been the established policy of the CDOG that the USGS is responsible for the issuance of permits for and inspections of exploration and production activities of those geothermal resources belonging to the Federal Government. Furthermore, those geothermal resources not belonging to the Federal Government are under the jurisdiction of the respective local, County, or State agencies. The following statements further clarify the jurisdiction, responsibilities, and cooperative measures.

1. The USGS has the responsibility to permit and inspect all exploration, development, production, and utilization operations where the lessee or his operator is conducting the activity to recover Federal geothermal resources. This responsibility includes all Federal lands and those Stockraising Homestead Act (SRHA) lands where the geothermal resources belong to the United States. If the resource is sold to a third party prior to the utilization on SRHA lands, the permitting authority for plant utilization rests with the appropriate local, County, or State agency. In cases where directional drilling from non-Federal lands into Federal geothermal resources occurs, the USGS is responsible for well permitting and inspection regardless of surface ownership; however, the CDOG shall be consulted for its advice prior to approval of any drilling program. An appropriate site stability analysis with an engineering review by a qualified engineering geologist and/or civil engineer will be conducted on each drill site in unstable terrain. The lessee or operator must provide written assurance to the USGS that legal rights to surface occupancy on SRHA lands have been obtained prior to approval of any permit.

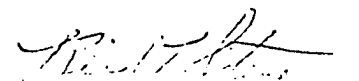
2. The CDOG has the responsibility to permit and inspect all exploration, development, and production operations where the lessee or his operator is conducting the activity to recover geothermal resources from non-Federal lands. In cases where directional drilling from Federal lands into non-Federal geothermal resources occurs, the CDOG is responsible for well permitting and inspection regardless of surface ownership; however, the USGS shall be consulted for its advice prior to approval of any drilling program. An appropriate site stability analysis with an engineering review by a qualified engineering geologist and/or civil engineer will be conducted on each drill site in unstable terrain, pursuant to Section 1931.5, Title 14, California Administrative Code. However, the operator must obtain a surface use permit from the appropriate Federal agency granting the right to access and use of the Federal surface lands for that purpose.
3. Dual completion of a single well that includes both non-Federal and Federal resources will require well permitting by both the USGS and CDOG. However, both agencies will work together to support each other and reduce duplication of records requirements and enforcement activities.
4. Exchange of information regarding site and drilling plans and well permits will continue on the part of both agencies for nonproprietary data. Exchange of proprietary data will require the concurrence of the lessees. Inspection by either USGS or CDOG representatives of activities permitted by the other agency shall be arranged through the regional or district office having jurisdiction over that area. During emergencies, if the regional or district staff having primary well permit authority is unavailable, the regional or district staff of the other agency shall take such action as is necessary to prevent pollution, or damage to persons, natural resources, or property. However, in this case the agency with primary well permitting authority shall be notified as soon as possible to assume jurisdiction.
5. If the CDOG is required to prepare an environmental impact document for a geothermal exploratory project under State law and the USGS is required to prepare an environmental impact document for the same project under Federal law, only one environmental document shall be prepared. That document shall meet the requirements of both the National Environmental Policy Act and the California Environmental Quality Act and shall be completed within 135 days from the date the operator files a complete application with the USGS or the CDOG for a geothermal exploratory project.

We trust this addresses the subject covered in our recent discussions and will provide the basis for our continued cooperative support of geothermal activities.

Sincerely,


M. G. Meffert
State Oil and Gas Supervisor

Concurred by:



Reid T. Stone

Area Geothermal Supervisor, USGS

Date: 5-8-79

Underground Injection Control Program
Memorandum of Agreement
Between
California Division of Oil and Gas
and
the United States Environmental Protection Agency
Region IX

I. General

This Memorandum of Agreement ("Agreement") establishes the responsibilities of and the procedures to be used by the Division of Oil and Gas ("Division") and the United States Environmental Protection Agency ("EPA") in administration of wells in the Class II portion ("Class II program") of the Underground Injection Control ("UIC") program in California. In general, this Agreement supplements the program described in the demonstration submitted in accordance with Section 1425(a) of the Safe Drinking Water Act ("1425 demonstration").

After it is signed by the Supervisor and the Regional Administrator, this Agreement shall become effective on the date notice of the Class II program approval is published in the Federal Register. The parties will review this Agreement at least once each year during preparation of the annual program update, during the State-EPA agreement ("SEA") process or at other times as appropriate (e.g. at mid-year review). The annual SEA shall be consistent with this Agreement and may not override this Agreement.

This Agreement may be modified upon the initiative of either party in order to ensure consistency with State or Federal statutory or regulatory modifications or supplements, or for any other purpose mutually agreed upon. Any such modifications or supplements must be in writing and must be signed by the Supervisor and Regional Administrator.

This Agreement shall remain in effect unless EPA determines that the Division's 1425 demonstration is no longer valid. Such a determination by EPA will be in accordance with Section 1425(c) of the Safe Drinking Water Act ("SDWA").

Nothing in this Agreement shall be construed to alter any requirements of SDWA or to restrict EPA's authority to fulfill its oversight and enforcement responsibilities under SDWA or other Federal laws, or to restrict the Division's authority to fulfill its responsibilities under State statutes. Nothing in this Agreement shall require or be construed to require EPA to violate Federal law or the Division to violate State law.

II.

A. Policy Statement

The purpose of the UIC program is to prevent any underground injection that endangers an underground source of drinking water ("USDW").

The Division has primary responsibility and authority over all Class II injection wells in the State of California. This includes Class II wells drilled and operated on Federally owned lands, but does not include such wells on Indian lands. The Division is responsible for administering the Class II program including but not limited to reports, permits, monitoring and enforcement actions. Implementation of the Class II program will be as described in the 1425 demonstration and will be supported by an appropriate level of staff and resources.

The Supervisor and the Regional Administrator agree to maintain a high level of cooperation and coordination between Division and EPA staff to assure successful and effective administration of the Class II program.

The Division shall promptly inform EPA of any proposed or pending modifications to laws, regulations, or guidelines, and any judicial decisions or administrative actions that might affect the program and the Division's authority to administer the program. The Division shall promptly inform EPA of any resource allocation changes (e.g. personnel, budget, equipment) that might affect its ability to administer the program.

EPA shall promptly notify the Division of the issuance, content, and meaning of Federal statutes, regulations, guidelines, standards, judicial decisions, policy decisions, directives, and other factors (including budgetary changes) that might affect the Class II program.

B. Information Sharing

1. Division

Confidentiality of State ?

The Division agrees that all information and records obtained or used in the administration of the Class II program including all UIC permit files shall be available for inspection by EPA or its authorized representative upon request. Division records may be copied by the EPA only when they are required by EPA to bring an enforcement action or for other such specific purpose. Any information obtained from the Division by EPA that is subject to a claim of confidentiality shall be treated by EPA in accordance with EPA regulations governing confidentiality (40 CFR Part 2 and 40 CFR 122.19).

The Division shall retain records used in the administration of the program for at least three years (40 CFR 30 and 40 CFR 35). If an enforcement action is pending, then all records pertaining to such action shall be retained until such action is resolved or the previously mentioned time period is met.

2. EPA

Copies of any written comments about the Division's program administration received by EPA from regulated persons, the

public, and Federal, State, and local agencies will be provided to the Supervisor within thirty (30) days of receipt.

3. Emergency Situations

Upon receipt of any information that any Class II injection operation is endangering human health or the environment and requires emergency response, the party in receipt of such information shall immediately notify by telephone the other party of the existence of such a situation.

C. Permits

Upon receipt by EPA, any Class II permit application and supporting information shall be immediately forwarded to the Division.

Some facilities and activities may require permits from the Division and EPA (and/or other State agencies) under different programs. When appropriate, the Division and EPA will participate in a joint permit processing procedure. The procedure will be developed on a case by case basis.

D. Compliance, Monitoring and Enforcement

1. Division

The Division shall adhere to the compliance monitoring, tracking, and evaluation program described in the 1425 Demonstration. The Division shall maintain a timely and effective compliance monitoring system including timely and appropriate actions on non-compliance.

2. EPA

EPA shall conduct periodic site and activity inspections on injection operations, giving priority to operations having the greatest potential to endanger public health.

EPA may participate with the Division in the inspection of wells or operator records. EPA shall notify the Division usually at least ten (10) days prior to any proposed inspection ~~and shall~~ describe the well(s) or record(s) to be inspected and the purpose of such inspection.

If the Division fails to take adequate enforcement action against a person violating the requirements for a Class II well, EPA may take Federal enforcement action. Federal enforcement actions will be in accordance with the State, facility and public notification procedures in Section 1423 of SDWA.

3. Emergency Situations

Situations endangering human health will receive immediate and paramount attention by the Division and EPA.

The party with initial knowledge of such situation shall immediately notify the other party by telephone.

E. Program Review and Evaluation

1. Division

The Division shall provide EPA with an annual report on the recent operation of the Class II program. Specific contents of the report are described in Attachment #1 and may be renegotiated from time to time. The period to be covered by the annual report shall be the calendar year ending December 31, with reports completed and available to EPA no more than 60 days later (March 1).

In addition, the Division shall provide a separate report of preventive actions taken by operators of new Class II wells. At minimum, this report shall include:

- a. the number and general type (e.g. injection pressure limit) of preventive actions proposed in the applications;
- b. the number and general type of preventive actions actually taken; and
- c. if necessary, a brief summary explaining the reason(s) for any differences between proposed and actual preventive actions (e.g., pending actions).

The report is due within 3 months after the second anniversary of the effective date of this Agreement. The final format will be negotiated at least 3 months prior to the due date.

If the Division proposes to allow any mechanical integrity tests other than those specified or justified in the 1425 Demonstration, the Division shall provide in advance to EPA sufficient information about the proposed test that a judgment about its usefulness and reliability can be made.

2. EPA

EPA shall conduct mid-year evaluations at least during the first 2 years of the Division's operation of the program. In part, the mid-year evaluations will be based on the reports provided above. At least 10 days prior to the evaluation, EPA shall notify the Division regarding the information, material, and program areas that will be covered. This may include selected permit files, budget records and public notification and complaint files. The evaluation may be conducted at either the Division's headquarters or one of its district offices.

guidance out on this?

mid - year evaluations

F. Public Participation

1. Division

The Division shall provide adequate public notice for its proposed actions as described in the Division's 1425 Demonstration.

Copies of such notices shall also be sent to:

- a. Director, Water Management Division, EPA-Region IX;
- b. Chairperson, State Water Resources Control Board; and
- c. Chairperson of the affected Regional Water Quality Control Board.

The Division's final decision on proposed actions shall contain a response to comments that summarizes the substantive comments received and the disposition of the comments. This shall become a part of that particular project file.

PP { At a minimum, the Division shall apply these public participation procedures to applications for new underground injection projects, significant modifications to existing permits, and to aquifer exemptions.

2. EPA

EPA shall participate at any scheduled public hearing at the request of the Division. Such requests shall be made at least 10 days prior to the hearing.

Any appropriate comments on the proposed action shall be made by EPA within the normal fifteen day comment period. The exception is the designation of exempted aquifers (see the section on Aquifer Exemptions).

G. Program Revision

A program revision may be necessary when the Division's or EPA's statutory authority is modified or when there is a substantial modification to the program. The procedure for revising the program shall be that described in 40 CFR 123.13(b).

H. Aquifer Exemption

An Underground Source of Drinking Water (USDW) may be exempted for the purposes of a Class II injection well if it meets the criteria in 40 CFR 146.04.

? { Aquifers exempted by the Division and EPA under this Agreement shall only be applicable for the injection of fluids related to Class II activities defined in 40 CFR 146.05(b).

OK
Aquifer exemptions made subsequent to the effective date of this Agreement shall not be effective until it is approved by the Administrator or Regional Administrator (if delegated) in writing.

OK
After the effective date of this Agreement, an aquifer exemption must be in effect prior to or concurrent with the issuance of a Class II permit for injection wells into that aquifer.

2. EPA

Within 10 days after receipt of the information on the aquifer(s) proposed by the Division for exemption, EPA shall notify the Division if any additional information is deemed appropriate. EPA shall either approve or disapprove the aquifer exemption within 60 days after receipt of all appropriate information. Any disapproval by EPA shall state the reasons for the decision. Requests for additional information and final determinations on aquifer exemptions shall be in written form.

If the new aquifer proposed for exemption is a non-hydrocarbon bearing USDW, EPA will coordinate its public participation activities on aquifer exemptions with the Division's public participation activities during project review.

I. Other Agency Involvement

The Division shall administer the Class II program and maintain close cooperation with California's State Water Resources Control Board (SWRCB) and the Minerals Management Service.

J. Definitions

1. Class II well is defined in 40 CFR 146.05(b).
2. Aquifer is defined in 40 CFR 146.03 and 122.3.
3. Day in this Agreement is defined as a working day.
4. Underground Source of Drinking Water (USDW) is defined in 40 CFR 146.03 and 122.3.

Sonia F. Crow
Regional Administrator
Environmental Protection Agency
Region IX

M.G. Mefford
M.G. Mefford
State Oil and Gas Supervisor
California Division of Oil and Gas

Date

4-2-1982
Date